NOTE XXXIII.

DESCRIPTION OF THREE NEW EXOTIC SPECIES OF THE HYMENOPTEROUS GENUS XYLOCOPA.

BY

C. RITSEMA Cz.

1. *Xylocopa tuberculiceps*, sp. n. ♀.

Allied to *Xylocopa tarsata* Smith, but larger.

Length 23 mm.; alar expanse 44 mm. — Black, with black pubescence, except a spot of ferrugineous hairs on the outer margin of the posterior metatarsus.

The head densely punctured, and densely covered with black pubescence on the face which is armed with four glossy tubercles: one between the antennae, another on the middle of the front margin of the clypeus, opposite to the median tubercle of the labrum, and two on the middle of the lateral margins of the clypeus.

The thorax punctured and covered with black pubescence, except the middle of the disk which is impunctate and naked. The hindborder of the scutellum rounded, not sharply edged. The wings dark fuscous, darker behind the enclosed cells, with shades of purple, blue and green. The pubescence of the legs black, with exception of a spot of ferrugineous hairs on the outer margin of the posterior metatarsus, and another smaller one of the same color on the apex of the under surface of the posterior tibiae. The small spot on the apex of the tibiae is however sometimes wanting.

The abdomen covered with large punctures, each puncture bearing a black hair; the sides of the abdomen very densely punctured and fringed with black hairs.

Three female specimens from the Cape of Good Hope (Horstock).

2. *Xylocopa assimilis*, sp. n. ♀.

Much resembling the South-American *Xylocopa Augusti* Lepel. but at once to be distinguished from that species by the sharply edged hind border of the scutellum, which is rounded in the American species.

Length 34 mm.; alar expanse 62 mm. — Black, with the apical margin of the ventral segments of the abdomen ferrugineous. The pubescence black, with exception of that on the second and following segments of the abdomen, which is ferrugineous.

The head glossy, not densely covered with irregular punctures; its pubescence black; the clypeus with a faint longitudinal impression on the middle, and a more distinct one on each lateral margin; the front margin of the clypeus impressed; the furrowed keel between the antennae much raised; behind each posterior ocellus a deep impression.

The thorax anteriorly and laterally densely covered with black pubescence; the middle of the disk naked, shining and covered with some large punctures. The hind border of the scutellum sharply edged, and slightly curved upwards. The legs densely covered with black pubescence. The wings dark brown with a bright green and purple iridescence.

The upper surface of the abdomen closely punctured on the third and following segments; more sparingly punctured on the first and second segment, especially on the first; the apical margin of the segments impunctate, and a smooth and shining longitudinal line on the middle of the third, fourth and fifth segments. The pubescence of the first segment black, that of the following ones bright ferrugineous. On the first and second segments this pubescence consists of a lateral fringe only, the third and fourth segments have moreover some short ferruginеous hairs on the disk and along the apical margin, the fifth segment a dense fringe of long ferruginеous hairs on the apical margin, whilst the sixth segment is covered all over with ferruginеous hairs. — The ventral segments closely punctured, with a smooth and shining longitudinal line on the middle; the apical margins ferruginеous, fringed with ferruginеous hairs.

The described female specimen has been captured at the island Sumbawa by Mr. Colffs, and presented to the Leyden Museum Collections by his Excellence J. W. van Lansberge.

3. *Xylocopa incompleta*, sp. n. ♀ and ♂.

Length about 27 mm.; alar expanse 52 mm.

Female: black, with black pubescence, except that on the head, thorax and outer margin of the anterior tibiae, which is fulvous-red.

The head densely covered with fulvous-red plumose pubescence, much paler on the clypeus and on the lower part of the cheeks; on the face the pubescence is intermixed with some black plumose hairs. The under surface of the flagellum of the antennae ferruginеous.

The upper surface of the thorax as well as the sides densely covered with fulvous-red plumose pubescence. The hind border of the scutellum sharply edged. The legs covered with black pubescence, except the outer margin of the anterior tibiae, on which the pubescence is fulvous-red. The wings dark brown with purple and green iridescence, and only two submarginal cells.

The abdomen densely punctured; the first segment thinly covered with black plumose hairs; the dense lateral fringe also consists of black plumose pubescence.

Male: black, the upper surface of the abdomen opaque dark bronzy green; the pubescence on the head, mesothorax and scutellum, first abdominal segment and legs whitish or pale ferrugineous, that on the prothorax and second and following segments of the abdomen black.

The head small, the eyes rather large, not approximating on the vertex; the pubescence dense, plumose, whitish, intermixed with black hairs near the ocelli. The under surface of the flagellum of the antennae ferrugineous.

The anterior portion of the thorax as well as the tegulae densely covered with black plumose pubescence; the remaining portion of the upper surface of the thorax as well as a patch below the wings densely covered with whitish plumose pubescence. The hind border of the scutellum sharply edged. The wings subhyaline with faint shades of purple, and with only two submarginal cells. The tarsi of the legs, especially those of the intermediate pair elongated. The anterior tibiae and tarsi fringed outside with whitish hairs; the intermediate tibiae covered on the upper surface with whitish pubescence and fringed outside with long pale ferrugineous hairs; the intermediate tarsi fringed with long pale ferrugineous hairs on both sides; the posterior tibiae with a longitudinal streak of whitish pubescence on the upper surface, laterally with long brown-black hairs; the posterior tarsi on the upper surface with long whitish hairs and some black ones along the outer margin. The posterior tibiae are prolonged at the apex of the under surface into a long and stout spine.

The upper surface of the abdomen is very densely punctured, opaque and of a dark bronzy green color. Its pubescence is plumose, whitish on the first, black on the second and following segments, although in certain lights it seems to be greyish on the fourth, fifth, sixth and seventh. The apical segment is widely truncated at the apex; its apical margin deeply incised at the middle. The ventral segments are sparingly punctured, subshining and almost without pubescence, with exception however of the apical segment which bears black hairs and a short ferruginеous fringe on its apical margin. The apical margin of the ventral segments is slightly toothed at the middle, that of the apical segment however armed with a sharp and distinct tooth.

One female from Java (S. Müller) and a male and female from West-Sumatra (J. W. van Lansberge).

Obs. The couple from Sumatra is not quite mature; moreover it has at one time been preserved in spirits, two causes to which the paler colors may perhaps be owing.

Leyden Museum, August 1880.